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EXAMINER

COOLEY, CHARLES E

ART UNIT PAPER NUMBER

1723

DATE MAILED: 10/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/436,637

Applicant(s)

NITTA ET AL.

Examiner

Charles E. Cooley

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-63 is/are pending in the application.
- 4a) Of the above claim(s) 16-62 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-15 is/are allowed.
- 6) ☒ Claim(s) 63 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-63 are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on 03 October 2002 and 10 March 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

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OFFICE ACTION

Election/Restriction

1. Claims 16-62 remain withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made without traverse in Paper No. 9.
2. This application contains claims 16-62 drawn to an invention nonelected without traverse in Paper No. 9. A complete reply to this final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Priority

3. Acknowledgment is made of applicant's claim for priority based on three Japanese applications. It is noted, however, that applicant has not filed certified copies of the applications as required by 35 U.S.C. § 119. The letter of 14 FEB 2000 regarding the priority documents is noted, however, the original priority documents are not in the file wrapper. Applicant states copies of the missing priority documents were submitted with the last response filed 03 OCT 2002, yet the file still lacks the documents. Applicant has agreed to submit the priority documents prior to payment of the issue fee.

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Drawings

4. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on 03 OCT 2002 and 10 MAR 2003 have been approved by the Examiner.

Specification

5. The abstract is acceptable.
6. The title is acceptable.

Claim Rejections - 35 U.S.C. § 112, first paragraph

7. The following is a quotation of the first paragraph of 35 U.S.C. § 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. The specification is objected to under 35 U.S.C. § 112, first paragraph, as the specification, as originally filed, does not provide support for the invention as is now claimed and fails to adequately teach how to make and/or use the invention, i.e., failing to provide an enabling disclosure;

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9. The subject matter added to the end of claim 63 is not supported by the originally filed disclosure. Applicant states support is found on page 1 and page of the specification, however, this section of the specification is the Background of the Invention and is not considered to support the language added to claim 63. Claim 63 therefore involves new matter.

Claim 63 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

10. Although it is unclear if Applicant intends to invoke 35 USC 112, sixth paragraph in amended claim 63 (note claim 1 was considered to invoke 112, sixth paragraph in the last office action in view of Applicant's remarks), assuming, *arguendo*, and for sake of consistency, that 112, sixth paragraph is invoked in claim 63, claim 63 must be rejected under 35 U.S.C. 112, first paragraph, because the specification does not reasonably provide enablement for the recited "chemical discharging means" performing the function of applying the mixture solution to the substrate without storing such that the mixture solution is prevented from being polluted. The claimed "chemical discharging means" is considered to be equivalent to element 33 (the capillary) which discharges liquid from the chemical supply means 31 into the solvent in the piping system 23 (see the last paragraph of page 23). Consequently, the element 33 has not been described as performing the function of applying the mixture solution to the substrate without

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storing such that the mixture solution is prevented from being polluted. Actually, the application of the mixture solution to the substrate is performed by the nozzles 24 and 25 of the piping system and not by element 33 (discharging means). The specification thus does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. The claims are not supported by an enabling disclosure because the person skilled in the art would not know how to make or use the invention without a description of elements to perform the function (MPEP 2185).

35 U.S.C. 112, ¶6 states that “[a]n element in a claim for a combination may be expressed as a means or step for performing a specified function, without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.”

While 35 U.S.C. 112, ¶6 permits a particular form of claim limitation, it cannot be read as creating an exception either to the description, enablement or best mode requirements of the first paragraph or the definiteness requirement of the second paragraph of 35 U.S.C. 112. *In re Knowlton*, 481 F.2d 1357, 178 USPQ 486 (CCPA 1973).

Claim 63 recites a “means” for performing specified functions and the examiner is treating such recitation under 35 U.S.C. 112, ¶6 pursuant to the “Supplemental Examination Guidelines for Determining the Applicability of 35 U.S.C. 112, ¶6”, USPTO,

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65 FR 38510, 38514 and MPEP 2181. However, the specification is devoid of the corresponding structure which performs both functions of discharging the liquid in to the solvent in the piping system and applying the mixture solution to the substrate without storing such that the mixture solution is prevented from being polluted. From the teachings of the specification, the element 33 is considered incapable of performing both of these functions. The instant specification therefore does not set forth the particular structure corresponding to the means-plus-function claim limitation in claim 63. In *B. Braun Medical, Inc. v. Abbott Lab.*, 124 F.3d 1419, 1424, 43 USPQ2d 1896, 1900 (Fed. Cir. 1997) the Federal Circuit stated that "structure disclosed in the specification is 'corresponding' structure only if the specification or prosecution history clearly links or associates that structure to the function recited in the claim. This duty to link or associate structure to function is the *quid pro quo* for the convenience of employing Section 112, Para. 6." Since no corresponding structure has been shown to be capable of performing the functions in the means-plus-function limitation of claim 63, the specification does not provide enablement for the recited "chemical discharging means".

Claim Rejections - 35 U.S.C. § 112, second paragraph

11. Claim 63 is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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The second paragraph of 35 U.S.C. § 112 requires a claim to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Under *In re Hammack*, 427 F.2d 1378, 166 USPQ 204 (CCPA 1970) and *In re Moore*, 169 USPQ 236 (CCPA 1971), claims must be analyzed to determine their metes and bounds so that it is clear from the claim language what subject matter the claims encompass. This analysis must be performed in light of the applicable prior art and the disclosure. The definiteness of the claims is important to allow others who wish to enter the market place to ascertain the boundaries of protection that are provided by the claims. *Ex parte Kristensen*, 10 USPQ 2d 1701, 1703 (BPAI 1989).

One of the purposes of 35 U.S.C. § 112, second paragraph, "is to provide those who would endeavor, in future enterprise, to approach the area circumscribed by the claims of a patent, with adequate notice demanded by due process of law, so that they may more readily and accurately determine the boundaries of protection involved and evaluate the possibility of infringement and dominance." *In re Hammack*, supra. As set forth in *Amgen Inc. v. Chugai Pharmaceutical Co., Ltd.*, 927 F.2d 1200, 1217, 18 USPQ2d 1016, 1030 (Fed. Cir. 1991):

The statute requires that "[t]he specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention." A decision as to whether a claim is invalid under this provision requires a determination whether those skilled in the art would understand what is claimed. See *Shatterproof Glass Corp. v. Libbey-Owens Ford Co.*, 758 F.2d 613, 624, 225 USPQ 634, 641 (Fed. Cir. 1985) (claims must "reasonably apprise those skilled in the art" as to their scope and be "as precise as the subject matter permits.").

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Claim 63 fails to particularly point out and distinctly claim the subject matter which applicant regards as the invention and are therefore of indeterminate scope for the following reasons:

Since no corresponding structure has been linked to the functions in the means-plus-function limitation of claim 63 as explained above, the claim is indefinite. *In re Dossel*, 115 F.3d 942, 946, 42 USPQ2d 1881, 1884 (Fed. Cir. 1997) and see MPEP 2185.

Claim Rejections - 35 U.S.C. § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

13. Claim 63 is rejected under 35 U.S.C. § 102(e) as being anticipated by Hashimoto et al. (USP 5,918,976).

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Assuming 35 USC 112, sixth paragraph is not invoked in claim 63, the patent to Hashimoto et al. (USP 5,918,976) discloses a chemical mixing system comprising a chemical reservoir 16; chemical supply means 15; a piping system (as seen in Figs. 1-2) with a discharge portion 25; and a chemical discharging means 14 arranged to discharge material from the chemical supply means 15 into the piping system.

14. Claim 63 is rejected under 35 U.S.C. § 102(b) as being anticipated by Rodgers et al. (USP 4,664,528).

Assuming 35 USC 112, sixth paragraph is not invoked in claim 63, the patent to Rodgers et al. (USP 4,664,528) discloses a chemical mixing system comprising a chemical reservoir 7; chemical supply means 10; a piping system (as seen in Fig. 1) with a discharge portion 28; and a chemical discharging means 13 or 19 arranged to discharge material from the chemical supply means 10 into the piping system.

15. Claim 63 is rejected under 35 U.S.C. § 102(b) as being anticipated by Cadeo et al. (USP 4,964,732).

Assuming 35 USC 112, sixth paragraph is not invoked in claim 63, the patent to Cadeo et al. (USP 4,964,732) discloses a chemical mixing system comprising a chemical reservoir 1; chemical supply means 5; a piping system (as seen in Fig. 3) with a discharge portion (downstream of 20); and a chemical discharging means 15 arranged to discharge material from the chemical supply means 15 into the piping system.

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16. Claim 63 is rejected under 35 U.S.C. § 102(b) as being anticipated by O'Dougherty et al. (USP 5,522,660).

Assuming 35 USC 112, sixth paragraph is not invoked in claim 63, the patent to O'Dougherty et al. (USP 5,522,660) discloses a chemical mixing system comprising a chemical reservoir 23; chemical supply means 20; a piping system (as seen in Fig. 1) with a discharge portion 56; and a chemical discharging means 31 arranged to discharge material from the chemical supply means 20 into the piping system.

* * *

Regarding the above 102 rejections, the language added to claim 63 regarding the application of the mixture solution to the substrate is but an intended use of the mixture solution with no corresponding structure to support the application of mixture solution function (as noted above). Accordingly, such an intended use of the mixture solution has not been afforded any patentable weight because it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647; *In re Sebald*, 122 USPQ 527; *In re Lemin et al.*, 140 USPQ 273; *In re Sinex*, 135 USPQ 302; *In re Pearson*, 181 USPQ 641. It is well settled that the intended use of an apparatus is not germane to its patentability. *In re Self*, 671 F.2d 1344, 213 USPQ 1 (CCPA 1982); *In re Yanush*, 477 F.2d 958, 177 USPQ 705 (CCPA 1973); *In re Finsterwalder*, 436

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F.2d 1028, 168 USPQ 530 (CCPA 1971); *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967).

Since the patents to Hashimoto et al. (USP 5,918,976), Rodgers et al. (USP 4,664,528), Cadeo et al. (USP 4,964,732), and O'Dougherty et al. (USP 5,522,660) discloses all of the claimed elements, the 102 rejections are proper.

Allowable Subject Matter

17. Claims 1-15 are allowable over the prior art of record for the reasons set forth in the previous office action.

Response to Amendment

18. Applicant's arguments filed 15 OCT 2003 with respect to claim 63 have been fully considered but they are not deemed to be persuasive for the many reasons outlined above..

19. Applicant's amendment necessitated the new grounds of rejection. Accordingly,

THIS ACTION IS MADE FINAL. See M.P.E.P. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL

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EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION. **ANY RESPONSE FILED AFTER THE MAILING DATE OF THIS FINAL REJECTION WILL BE SUBJECT TO THE PROVISIONS OF MPEP 714.12 AND 714.13.**

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Charles Cooley whose telephone number is ☎ (703) 308-0112.

21. Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center 1700 receptionist whose telephone number is ☎ (703) 308-0651.



Dated: **23 October 2003**

Charles Cooley
Primary Examiner
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